

WHAT IS CLAIMED IS:

1 1. A method of controlling a transmission rate, comprising:
2 determining whether a pause has been received;
3 determining whether a maximum of an inter-frame spacing (IFS) has been
4 reached if the pause has been received; and
5 increasing the inter-frame spacing by a value if the maximum of the inter-frame
6 spacing has not been reached to reduce the transmission rate.

1 2. The method according to claim 1, wherein the value is based on a selection from
2 the group consisting of a pause time in a pause frame, a frequency of pause frames, and a
3 proximity of a current inter-frame spacing to the maximum or a minimum of the inter-frame
4 spacing.

1 3. The method according to claim 1, wherein the value is in byte time units.

1 4. A method of training a transmission rate, comprising:
2 determining whether a pause has been received;
3 determining whether a minimum of an inter-frame spacing (IFS) has been reached
4 if the pause has not been received; and
5 decreasing the inter-frame spacing by a value if the minimum of the inter-frame
6 spacing has not been reached to train the transmission rate.

1 5. The method according to claim 4, further including waiting for an event to occur

2 prior to determining whether the pause has been received.

1 6. The method according to claim 5, wherein the event is a packet count.

1 7. The method according to claim 5, wherein the event is a poll time.

1 8. The method according to claim 4, wherein the value is in byte time units.

1 9. An input/output controller, comprising:

2 a receiver circuit to determine whether a pause has been received; and

3 a logic circuit adapted to determine whether a maximum of an inter-frame spacing
4 (IFS) has been reached if the pause has been received, and to increase the inter-frame
5 spacing by a value if the maximum of the inter-frame spacing has not been reached to
6 reduce a transmission rate.

1 10. The input/output controller according to claim 9, wherein the value is based on a

2 selection from the group consisting of a pause time in a pause frame, a frequency of pause

3 frames, and a proximity of a current inter-frame spacing to the maximum or a minimum of the

4 inter-frame spacing.

1 11. The input/output controller according to claim 9, wherein the value is in byte time

2 units.

1 12. An input/output controller, comprising:
2 a receiver circuit to determine whether a pause has been received; and
3 a logic circuit adapted to determine whether a minimum of an inter-frame spacing
4 (IFS) has been reached if the pause has not been received, and to decrease the inter-frame
5 spacing by a value if the minimum of the inter-frame spacing has not been reached to
6 train a transmission rate.

1 13. The input/output controller according to claim 12, wherein the logic circuit is
2 further adapted to wait for an event to occur prior to determining whether the pause has been
3 received by the receiver circuit.

1 14. The input/output controller according to claim 13, wherein the event is a packet
2 count.

1 15. The input/output controller according to claim 13, wherein the event is a poll
2 time.

1 16. The input/output controller according to claim 12, wherein the value is in byte
2 time units.

1 17. A program code storage device, comprising:
2 a machine-readable storage medium; and

3 machine-readable program code, stored on the machine-readable storage medium,
4 having instructions to
5 determine whether a pause has been received,
6 determine whether a maximum of an inter-frame spacing (IFS) has been
7 reached if the pause has been received, and
8 increase the inter-frame spacing by a value if the maximum of the inter-
9 frame spacing has not been reached to reduce a transmission rate.

1 18. The program code storage device according to claim 17, wherein the value is
2 based on a selection from the group consisting of a pause time in a pause frame, a frequency of
3 pause frames, and a proximity of a current inter-frame spacing to the maximum or a minimum of
4 the inter-frame spacing.

1 19. The program code storage device according to claim 17, wherein the value is in
2 byte time units.

1 20. A program code storage device, comprising:
2 a machine-readable storage medium; and
3 machine-readable program code, stored on the machine-readable storage medium,
4 having instructions to
5 determine whether a pause has been received,
6 determine whether a minimum of an inter-frame spacing (IFS) has been
7 reached if the pause has not been received, and

decrease the inter-frame spacing by a value if the minimum of the inter-frame spacing has not been reached to train a transmission rate.

1 21. The program code storage device according to claim 20, wherein the machine-
2 readable program code further includes instructions to wait for an event to occur prior to
3 determining whether the pause has been received.

1 22. The program code storage device according to claim 21, wherein the event is a
2 packet count.

1 23. The program code storage device according to claim 21, wherein the event is a
2 poll time.

1 24. The program code storage device according to claim 20, wherein the value is in
2 byte time units.

1 25. A network system, comprising:

2 a controller system to determine whether a pause has been received, to determine
3 whether a maximum of an inter-frame spacing (IFS) has been reached if the pause has
4 been received, and to increase the inter-frame spacing by a value if the maximum of the
5 inter-frame spacing has not been reached to reduce a transmission rate; and
6 a trainer system to determine whether the pause has been received, to determine
7 whether a minimum of the inter-frame spacing has been reached if the pause has not been

8 received, and to decrease the inter-frame spacing by a second value if the minimum of the
9 inter-frame spacing has not been reached to train the transmission rate.

1 26. The network system according to claim 25, wherein the value is in byte time
2 units.

1 27. The network system according to claim 25, wherein the second value is in byte
2 time units.

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1 28. The network system according to claim 25, wherein the value is based on a
2 selection from the group consisting of a pause time in a pause frame, a frequency of pause
3 frames, and a proximity of a current inter-frame spacing to the maximum or the minimum of the
4 inter-frame spacing.